

AMENDMENTS TO THE SPECIFICATION

Please replace the fourth paragraph at page 107 with the following amended paragraph:

Example 3

2-(pyrrolidin-2-ylmethylamino)-4-(perhydroazepin-1-yl)pyrimidine

To the compound prepared in Reference Example 3 (1.06 g) was added a 95% aqueous solution of trifluoroacetic acid (20 mL) with ice cooling and the mixture was stirred for 2 hours at 0°C. The reaction mixture was concentrated and the residue was purified by column chromatography on silica gel (chloroform : methanol = 9 : 1 → chloroform : methanol : 28% ammonia water = 80 : 10 : 1) to give the compound of the present invention (0.72 g) having the following physical data.

TLC : R_f 0.08 (chloroform : methanol : 28% ammonia water = 80 : 10 : 1);

NMR (CDCl₃) : δ 1.48 (m, 6H), 1.73 (m, 4H), 2.07 (m, 2H), 2.76 (m, 2H), 3.02 (m, 2H), 3.14 (m, 2H), 3.55 (m, 3H), 3.89 (m, 1H), 4.84 (d, J = 6.30 Hz, 1H), 5.78 (d, J = 6.30 Hz, 1H), 7.79 (d, J = 6.30 Hz, 1H);

MS (FAB, Pos., Glycerin + m-NBA) (m/z) : 276 (M + H)⁺.

Please replace the first paragraph at page 108 with the following amended paragraph:

Example 4

2-(1-benzylpyrrolidin-3-ylamino)-4-(perhydroazepin-1-yl)pyrimidine

A mixture of the compound prepared in Reference Example 1 (4.00 g) and 1-benzyl-3-aminopyrrolidine (4.33 g) was stirred for 16 hours at 90°C. The resulting solution was cooled and purified by column chromatography on silica gel (ethyl acetate : hexane = 1 : 2 →

chloroform : methanol : 28% ammonia water = 80 : 10 : 0.6) to give the title compound (4.85 g) having the following physical data.

TLC : Rf 0.45 (chloroform : methanol : 28% ammonia water = 80 : 10 : 1);

NMR (DMSO-d₆) : δ 1.50 (m, 4H), 1.74 (m, 5H), 2.21 (m, 1H), 2.60 (dd, J = 9.89, 5.22 Hz, 1H), 2.70 (m, 1H), 2.83 (m, 1H), 3.00 (dd, J = 9.89, 6.87 Hz, 1H), 3.55 (m, 4H), 3.78 (s, 2H), 4.33 (m, 1H), 5.93 (d, J = 6.32 Hz, 1H), 6.35 (m, 1H), 7.31 (m, 5H), 7.73 (d, J = 6.04 Hz, 1H).

Please replace the second paragraph at page 108 with the following amended paragraph:

Example 5

4-(perhydroazepin-1-yl)-2-(pyrrolidin-3-ylamino)pyrimidine

Under atmosphere of argon to a solution of the compound prepared in Example 4 (4.5 g) in ethanol (150 mL) was added palladium hydroxide (0.97 g), and under atmosphere of hydrogen the mixture was stirred for 4 hours at 75°C. The reaction mixture was cooled and filtered, and the filtrate was concentrated. The residue was purified by column chromatography on silica gel (methylene chloride : methanol : 28% ammonia water = 80 : 10 : 0.5 → 80 : 10 : 1) to give the compound of the present invention (2.96 g) having the following physical data.

TLC : Rf 0.15 (chloroform : methanol : 28% ammonia water = 80 : 10 : 1);

NMR (DMSO-d₆) : δ 1.45 (m, 4H), 1.62 (m, 6H), 1.93 (m, 1H), 2.66 (dd, J = 11.26, 4.40 Hz, 1H), 2.76 (m, 1H), 2.94 (m, 2H), 3.59 (m, 4H), 4.16 (m, 1H), 5.85 (d, J = 6.04 Hz, 1H), 6.42 (m, 1H), 7.72 (d, J = 6.04 Hz, 1H).